

WHAT IS CLAIMED IS:

1. A long weather strip, comprising:

an attach portion attachable along a window frame for vehicle; and

5 a lip portion for sealing a glass window pane for vehicle, the lip portion protruding from the attach portion toward the glass window pane to be in contact therewith, the glass window pane movable within the window frame;

10 wherein the lip portion is resiliently pressed onto the surface of the glass window pane;

the lip portion includes a rough surface portion made of a molding material comprising the following (a) to (c):

(a) olefin thermoplastic elastomer in which a content ratio of polyolefin resin as a hard segment is 50 mass% or more 15 as a whole,

(b) solid particles having an average particle diameter in a range from 1 to 100 μm , and

20 (c) liquid lubricant at room temperatures, the rough surface portion provided at least in a part of the lip portion that is pressed onto a face of the glass window pane; and

the rough surface portion has a surface that is formed in a corrugation state, and is formed with a number of small projections with the solid particles on a corrugated face of the rough surface portion.

2. The weather strip according to claim 1, wherein the olefin thermoplastic elastomer contains a hard segment made of polypropylene resin, and a soft segment made of 5 ethylene-propylene-diene copolymer.

3. The weather strip according to claim 1, wherein the lubricant includes silicone oil.

10 4. The weather strip according to claim 1, wherein the solid particle is a material not melted at the time of molding the rough surface portion.

15 5. The weather strip according to claims 1, wherein the solid particle includes at least one kind of spherical particle selected from a group consisting of silicone resin particle, glass bead, glass balloon, silica particle, polymethyl methacrylate resin particle, and polyether-ether-ketone resin particle.

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6. The weather strip according to claim 1, wherein the rough surface portion contains 1 to 20 mass parts of the solid particles and 1 to 20 mass parts of the lubricant to 100 mass parts of the olefin thermoplastic elastomer.

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7. The weather strip according to claim 1, further comprising:

a long resin main portion made of a molding material containing olefin thermoplastic elastomer having a lower
5 hardness than the olefin thermoplastic elastomer of (a);

wherein the rough surface portion is provided at least in a part on the surface of the resin main portion.

10 8. The weather strip according to claim 7,

wherein the resin main portion and the rough surface portion have miscibility, and are welded at a boundary therebetween.

15 9. The weather strip according to claim 7,

wherein the rough surface portion is formed in a layer, being from 10 to 100 μm in an average thickness.

10. The weather strip according to claim 7,

20 wherein the rough surface portion has a corrugated face that is formed with a plurality of line-like protruded portions extending longitudinally and being spaced at an interval in the width direction, the small projections being formed on the surface of the protruded portion.

11. The weather strip according to claim 7,

wherein the rough surface portion is formed like a longitudinally extending line, and a plurality of line rough surface portions are spaced at an interval in the width direction.

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direction.

12. The weather strip according to claim 7, further comprising:

10 a groove for guiding the glass window pane in contact with a peripheral edge thereof;

wherein the groove includes a base portion making up a bottom of the groove, and side wall portions rising from both ends of the base portion in the width direction and making up the side walls of the groove; and

15 the resin main portion includes the base portion, the side wall portions, and the lip portions integrally.

13. The weather strip according to claim 12, wherein the rough surface portion is further provided on a surface inside the 20 groove in the base portion.

14. The weather strip according to claim 12, wherein the rough surface portion is further provided on at least one of the surfaces inside the groove in the side wall portion and a back 25 face of the lip portion opposite the surface.

15. The weather strip according to claim 1,
wherein the weather strip is formed as a belt molding
that is attached along an edge of the window frame.

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16. A weather strip assembly for vehicle comprising:
at least two long weather strips for vehicle mounted along
a window frame for vehicle and having a groove for guiding a
glass window pane in contact with a peripheral edge of the glass
10 window pane movable within the window frame; and
a joint portion for connecting the longitudinal terminals
of the weather strips;

wherein each of the weather strips comprises a base portion
making up a bottom of the groove, the side wall portions rising
15 from both ends of the base portion in the width direction and
making up the side walls of the groove, and the lip portions
overhanging inside the groove from the side wall portions and
resiliently pressed onto a surface of the glass window pane;

at least one of the weather strips having a rough surface
20 portion made of a molding material containing the following
(a) to (c):

(a) olefin thermoplastic elastomer in which a content
ratio of polyolefin resin as a hard segment is 50 mass% or more
as a whole,

25 (b) solid particles having an average particle diameter

in a range from 1 to 100 μm , and

(c) liquid lubricant at room temperatures, the rough surface portion is provided in a part of the lip portion pressed onto the surface of the glass window pane; and

5 the rough surface portion has a surface formed in a corrugation state, and is formed with a number of small projections with the solid particles on a corrugated face of the rough surface portion.

10 17. The weather strip assembly according to claim 16,

wherein the at least one of the weather strips is a glass run channel further including a rough surface portion in at least one part of

(a) a surface inside the groove in the base portion,

15 (b) a surface inside the groove in the side wall portion, and

(c) a back face of the lip portion opposed to the surface inside the groove in the side wall portion.

18. A method for manufacturing a long weather strip
20 for vehicle, wherein the weather strip includes: an attach portion attachable along a window frame for vehicle, and a lip portion for sealing a glass window pane for vehicle, the lip portion protruding from the attach portion toward the glass window pane to be in contact therewith, the glass window pane
25 movable within the window frame; and the lip portion has a rough

surface portion provided at least in a part of the lip portion pressed onto a face of the glass window pane; the method comprising:

heating and melting a molding material for formation of
5 the rough surface portion, the molding material containing the following (a) to (c);

(a) olefin thermoplastic elastomer in which a content ratio of polyolefin resin as hard segment is 50 mass% or more as a whole,

10 (b) solid particles having an average particle diameter in a range from 1 to 100 μm , and

(c) liquid lubricant at room temperatures; and

extruding the melted molding material from a resin extrusion mold, thereby forming the rough surface portion having
15 a surface formed in a corrugation state and formed with a number of small projections with the solid particles on a corrugated face thereof.

19. The manufacturing method according to claim 18,

20 wherein the rough surface portion is formed at least in a part on the surface of the long resin main portion;

the step of heating and melting includes heating and melting the molding material for formation of the rough surface portion and a molding material for formation of the resin main

25 portion; and

the step of extruding includes extruding the molten molding materials from the resin extrusion mold at the same time, thereby forming the resin main portion and the rough surface portion.

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20. The manufacturing method according to claim 18,
wherein the extruding step includes extruding the molten molding material for formation of the rough surface together with a long preformed main portion from the resin extrusion
10 mold, thereby forming the rough surface portion at least in a part on the surface of the long preformed main portion.